AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for scheduling a decoding process of coded data blocks (61) transmitted over a wireless link (20) in a communication network, the method comprising (21) characterized by the steps of:

storing a coded, data block (61) in a queue (71) if all decoders of a cluster (72) of iterative decoders are unavailable;,

decoding the coded data block (61) in a decoder of said cluster; and

returning any of the coded data block being unsuccessfully decoded to said queue; and

combining said unsuccessfully decoded data block with a corresponding retransmitted coded data block (62).

2. (Currently Amended) The method according to claim 1, wherein the iterative decoders of the cluster (72) are arranged in parallel.

3. (Currently Amended) The method according to claim 1 or 2, wherein a the transmission between a physical layer (36) of a stack of protocols in a communication apparatus (1) and a physical layer (46) of a stack of protocols in the a communication network (21) is controlled by a protocol (51) requiring an ACK/NACK-report of the transmission within a predetermined time limit.

4. (Currently Amended) The method according to claim 3, wherein the a NACK-report is transmitted to a the transmitter of the data block (61) if the time limit is reached before the stored data block (61) is moved to any of the decoders of the cluster (72).

5. (Currently Amended)The method according to claim 4 any of the claims 3-4, wherein an the ACK-report is transmitted to the transmitter of the data block (61) if said block (61) is successfully decoded in any of the decoders of the the cluster (72) within the time limit.

6. (Currently Amended) The method according to claim 5 any of the claims 3-5, wherein the NACK-report is transmitted to the transmitter of the data block (61) if said block (61) is unsuccessfully decoded in any of the decoders of the cluster (72) within the time limit.

7. (Currently Amended) The method according to claim 6 any of the claims 3-6, wherein the NACK-report is transmitted to the transmitter of the data block (61) if the decoding of said block (61) in any of the decoders of the cluster (72) is not finished within the time limit.

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8. (Currently Amended) The method according to claim 7 ~~any of the claims 3-4 or 6-7~~, wherein the data block ~~(61)~~ is moved into ~~the~~ an end of the queue ~~(71)~~.

9. (Currently Amended) The method according to claim 8, wherein the data block ~~(61)~~ being unsuccessfully decoded is combined with the ~~a~~ retransmitted data block ~~(62)~~ to a combined data block ~~(63)~~ and stored in the queue ~~(72)~~.

10. (Currently Amended) The method according to claim 9, wherein the combined data block ~~(63)~~ is processed ~~according to any of the claims 5-11~~.

11. (Currently Amended) The method according to claim 10 ~~any of the proceeding claims~~, wherein the data blocks ~~(61, 63)~~ are moved from the queue ~~(71)~~ to any of the decoders of the cluster ~~(72)~~ according to a First In First Out (FIFO) principle.

12. (Currently Amended) The method according to claim 10 ~~any of the claims 1-10~~, wherein the data blocks ~~(61, 63)~~ are moved from the queue ~~(71)~~ to any of the decoders of the cluster ~~(72)~~ according to an ~~"~~ "oldest data block first" ~~"~~ principle.

13. (Currently Amended) The method according to claim 12 ~~any of the proceeding claims~~, wherein a ~~the~~ maximum number of iterations in a certain decoder of said cluster is adapted automatically by a ~~the~~ CPU ~~75~~.

14. (Currently Amended) The method according to claim 13 ~~15~~, wherein the maximum number of iterations is adapted in dependence on the number of blocks ~~(61, 63)~~ being moved directly from ~~the~~ a beginning to the end of the queue ~~(71)~~.

15. (Currently Amended) The method according to claim 14 ~~15~~, wherein the maximum number of iterations is adapted in dependence on whether the ~~a~~ coded data block ~~(61)~~ to be decoded for a ~~the~~ first time or a combined data block ~~(63)~~ is received by said decoder.

16. (Currently Amended) The method according to claim 15 ~~any of the proceeding claims~~, wherein the decoders are activated automatically by the CPU ~~75~~ when a ~~the~~ bitrate of ~~the~~ a received stream of data blocks ~~(61, 62)~~ reaches certain predefined levels.

17. (Currently Amended) The method according to <u>claim 16</u> ~~any of the previous claims~~, wherein the decoding process of any of the decoders of the cluster ~~(72)~~ is terminated before a maximum number of iterations is reached.

18. (Currently Amended) The method according to <u>claim 17</u> ~~any of the previous claims~~, wherein <u>the</u> coded data blocks ~~(61)~~ are received according to a HARQ (Hybrid ARQ) protocol.

19. (Currently Amended) An electronic communication apparatus ~~(1)~~ capable of decoding coded data blocks ~~(61)~~ received over a wireless link ~~(20)~~ in a communication network ~~(21)~~, <u>the apparatus comprising</u> **~~characterized in that the communication apparatus (1)~~** ~~comprises~~<u>:</u>

a queue ~~(71)~~, which is adapted for temporarily storing the coded data blocks<u>;</u> ~~(61),~~

a cluster ~~(72)~~ of decoders, which is adapted to decode the coded data blocks ~~(61)~~ when any of the decoders of the cluster ~~(72)~~ is available and to return to said queue any coded data block being unsuccessfully decoded by ~~any~~ of said decoders<u>;</u>~~;~~ and

a controller ~~(75)~~, which is adapted to combine <u>the</u> ~~a~~ coded data block ~~(62)~~ being unsuccessfully decoded with a corresponding retransmitted coded data block ~~(63)~~.

20. (Currently Amended) The electronic communication apparatus according to claim 19, wherein the decoders -of the cluster ~~(72)~~ are arranged in parallel.

21. (Currently Amended) The electronic communication apparatus according to <u>claim 20</u> ~~any of the claims 19 or 20~~, wherein said apparatus ~~(1)~~ comprises a receiver, which is adapted for receiving the data blocks ~~(61, 62)~~ with a bitrate of up to at least 15 Mbps.

22. (Currently Amended) The electronic communication apparatus according to <u>claim</u> <u>20,</u> ~~any of the claims 19-20~~ wherein said apparatus ~~(1)~~ comprises a receiver, which is arranged to receive <u>the</u> coded data blocks according to a HARQ protocol.

23. (Currently Amended) The electronic communication apparatus according to <u>claim 21</u> ~~any of the claims 19-21~~, wherein said apparatus ~~(1)~~ is adapted to receive the data blocks ~~(61, 62)~~ according to a protocol requiring a ACK/NACK-report within a predetermined time limit.

24. (Currently Amended) The electronic communication apparatus according to claim ~~22~~ 23, wherein said apparatus ~~(1)~~ is adapted for transmitting the ~~a~~ NACK-report to a transmitter of the data ~~5~~ block ~~(61)~~ if said block ~~(61)~~ is not moved to any of the decoders of the cluster (72) within the time limit.

24. (Canceled)

25. (Currently Amended) The electronic communication apparatus according to claim ~~any of the claims 22~~ 24, wherein said apparatus ~~(1)~~ is adapted for transmitting ~~a NACK~~ the ACK-report to the transmitter of the data block ~~(61)~~ if said block ~~(61)~~ is ~~un~~successfully decoded in any of the decoders of the cluster ~~(72)~~ within the time limit.

26. (Currently Amended) The electronic communication apparatus according to ~~any of the claims 22-24~~ claim 25, wherein said apparatus ~~(1)~~ is adapted for transmitting the ~~a~~ NACK-report to the transmitter of the data block ~~(61)~~ if ~~the decoding of~~ said block ~~(61)~~ is unsuccessfully decoded in any of the decoders of the cluster ~~(72) can not be finished~~ within the time limit.

27. (Currently Amended) The electronic communication apparatus according to claim 26 ~~30 to any of the claims 19-26~~, wherein said apparatus ~~(1) urther comprises feedback loops (73, 74) between the beginning of the queue (71) and the end of the queue (71), and between the cluster of decoders (72) and the end of the queue (71), and wherein said apparatus (1) is adapted for moving the data block (61) to the end of the queue (71) when the decoding process is not initiated or successfully completed~~ is adapted for transmitting the NACK-report to the transmitter of the data block if the decoding of said block in any of the decoders of the cluster can not be finished within the time limit.

28. (Currently Amended) The electronic communication apparatus according ~~5 to~~ to claim 27 ~~any of the claims 19-27~~, wherein said apparatus ~~(1) is adapted for receiving a retransmitted data block (62), combining the retransmitted data block (62) with a stored data block (61) to a combined data block (63), and storing the combined data block (63)~~ further comprises:
      feedback loops between a beginning of the queue and an end of the queue, and between the cluster of decoders and the end of the queue; and
      wherein said apparatus is adapted for moving the data block to the end of the queue when the decoding is not initiated or successfully completed.

29. (Currently Amended) The electronic communication apparatus according to claim 28, wherein said apparatus is adapted ~~to process the combined data block (63) according to any of the claims 24-28.~~ for receiving a retransmitted data block, combining the retransmitted data block with a stored data block to a combined data block, and storing the combined data block.

30. (Currently Amended) The electronic communication apparatus according to <u>claim</u> ~~any of the claims 19-~~29, <u>wherein said apparatus is adapted to process the combined data block</u> ~~wherein the queue (71) is provided as a rewritable memory~~.

31. (Currently Amended) The electronic communication apparatus according to <u>claim 30</u> ~~any of the claims 19-30~~, wherein ~~a controller (75) of the apparatus (1) is arranged to automatically adapt the number of active decoders when the bitrate of the received stream of data blocks (61, 62) reaches certain predefined levels~~ <u>the queue is provided as a rewritable memory</u>.

32. (Currently Amended) The electronic communication apparatus according to <u>claim 31</u> ~~any of the claims 19-31~~, wherein ~~the controller (75) is arranged to adapt the maximum number of iterations of a certain decoder in dependence on the number of blocks (61, 63) being moved directly from the beginning to the end of the queue (71)~~ <u>a controller of the apparatus is arranged to automatically adapt the number of active decoders when the bitrates of the received stream of data blocks reaches certain predefined levels</u>.

33. (Currently Amended) The electronic communication apparatus according <u>to claim 32</u> ~~to any of the claims 19-31~~, wherein the controller ~~(75)~~ is
arranged to adapt the maximum number of iterations of a certain decoder in dependence on <u>the number of blocks being moved directly from the beginning to the end of the queue</u> ~~whether a coded data block (61) to be decoded for the first time or a combined data block (63) is received by said decoder~~.

34. (Currently Amended) The electronic communication apparatus according to <u>claim 33</u> ~~any of the claims 19-33~~, wherein <u>the controller is arranged to adapt the maximum number of iterations of a certain decoder in dependence on whether a coded data block to be decoded for the first time or the combined data block is received by said decoder</u> ~~apparatus (1) is further adapted to move the data blocks (61, 63) from the queue (71) to any of the decoders of the cluster (72) according to a First In First Out (FIFO) principle~~.

35. (Currently Amended) The electronic communication apparatus according to ~~claim 34~~ ~~any of the claims 19-33~~, wherein the apparatus ~~(1)~~ is further adapted to move the data blocks ~~(61, 63)~~ from the queue ~~(71)~~ to any of the decoders of the cluster ~~(72)~~ according to ~~an "oldest~~ ~~data block first"~~ a First In First Out (FIFO) principle.

36. (Currently Amended) The electronic communication apparatus according to ~~claim 35~~ ~~any of the claims 19-35,~~. wherein ~~the controller (75) is arranged to terminate the decoding~~ ~~process of any of~~ the apparatus is further adapted to move the data blocks from the queue to any of the decoders of the cluster according to an "oldest data block first" principle. ~~(72) before a~~ ~~maximum number of iterations is reached~~

37. (Currently Amended) The electronic communication apparatus according to claim 36 ~~25 to any of the claims 19-36~~, wherein the controller is arranged to terminate the decoding process of any of the decoders of the cluster before a maximum number of iterations are reached. ~~said apparatus is a mobile telephone (1).~~

38. (Currently Amended) The electronic communication apparatus according to claim 37 ~~any of the claims 19-36~~, wherein said apparatus is a mobile telephone ~~communicator, an~~ ~~electronic organizer, or a smartphone~~.

39. (New) The communication apparatus according to claim 38, wherein said apparatus is a communicator, an electronic organizer, or a smartphone.